Property Management: The Millrace, A Case Study

By Steve Knauth

Since its inception in 1968, the Essex Land Trust (ELT) has focused on acquiring open space for public use. Today, with 24 properties totaling around 600 acres and another 400 acres managed jointly with the Town of Essex, the focus also includes managing the open space, making it attractive to the public while enhancing the natural beauty and noteworthy attributes of each.

In 2015, ELT was invited to join an initiative sponsored by the Connecticut Land Conservation Council along with the Lower Connecticut River Valley Council of Governments, funded by the Natural Resources Conservation Service. Along with other land trusts in our region, ELT participated in a series of workshops to develop three projects in areas of high importance to all. ELT elected to participate in the Property Management project.

Project heads were Rebecca Washburn of the national Land Trust Alliance and Shane Hetzler, a professional forester with Back Forty Forestry, LLC. The resulting Property Management Plan for the Millrace offers a look into how a plan is put together and what it entails.

ELT objectives were plain: gain a clear understanding of the ecological communities on the property and then develop a stewardship strategy to preserve the property and improve the community. A final report would provide recommendations for property restoration and stewardship, suggest long- and short-term stewardship projects and assist stewards in expanding public access.

Excerpts from the plan follow:

Inspecting The Property

Hetzler met with concerned parties in February of 2016 to look over the 6-acre parcel of forest, wetlands and river, which was opened to public for hiking in 2008. The Millrace is a former industrial site in Ivoryton, along the Fall River. The name derives from the water course which runs off the river and was used as a power source for the local ivory works. The land had not been used for a generation when it was acquired and was heavily overgrown, having been inundated in the Great Flood of 1982. Hetzler assessed the geology, soils and hydrology, as well as the physical characteristics of forest structure, wildlife habitat and invasive species.
Data was used from different agencies, including the Univ. of Connecticut, the Natural Resources Conservation Service and state DEEP. Aerial photos dating back to 1934 provided a history of forest type, forest cover, vegetation, site conditions and non-forested landscape, including marsh and water courses.

**What They Found**
Hetzler’s inspection revealed a “moderate to heavy” concentration of multiple invasive species, mostly along the Falls River. These included multiflora rose, Japanese barberry and knotweed, phragmites and Norway maple. Tree die-back was noted, some of it near trails, a situation which could impact trail users’ safety.

Four types of soils were discovered, from sandy loam to stony soil, reflecting the differing landscapes. Hydrology studies took in the river as well as the old factory mill race and the wetlands at the eastern boundary. A drainage system was found and, at one time, there was a dam near the present foot bridge which created a pond which was used for skating in the winter.

**Important Habitat**
Millrace was found to be an important source of food and shelter for a variety of wildlife. The mixed hardwood forest of black cherry, oaks and hickories provide food for birds and mammals. The oak trees’ acorns are another vital food source. “Although the Millrace is a relatively small property, its location in a highly residential area and its abundant supply of water make it an important resource for local wildlife,” Hetzler’s report says.

The property’s wetlands are a special resource. Wetlands are used as breeding grounds, over-wintering habitat and feeding grounds for migratory birds. The accompanying brush, bramble, small shrubs and trees create excellent habitat along the river’s edge. “Seven [of the ELT’s] properties are located adjacent to the Falls River, creating an important and impressive corridor of protection,” the report states. “Stewardship efforts impact not only the Millrace, but the natural communities downstream and overall water quality.”

**Recommendations**
Hetzler’s final plan presents management recommendations compatible with ELT goals and interests. The ELT “should continue to be managed as an open space for community recreation and wildlife habitat. Trails and signage continue to be maintained at the excellent condition that they are currently in.” The Management Plan for the Millrace includes the following recommendations:

1. Control invasive species, which are established in more than one area, by identifying and prioritizing areas for control/removal.
2. Target the removal of tree die-backs and snags where they pose a threat to public safety.
3. Continue to back out the nails on old property signs to allow for continued diameter growth of the trees.
4. The Land Trust should continue to monitor the infrastructure and the interpretive signage that provides a unique educational experience for the users of the property.

**Trees & Bushes found at The Millrace**

<table>
<thead>
<tr>
<th>Trees</th>
<th>Bushes</th>
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<tr>
<td>Red Maple</td>
<td>Climbing Euonymous</td>
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<tr>
<td>Norway Maple</td>
<td>American Beech</td>
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<tr>
<td>Sugar Maple</td>
<td>Japanese Knotweed</td>
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<tr>
<td>Speckled Alder</td>
<td>White Ash</td>
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<tr>
<td>Japanese Barberry</td>
<td>Easter Red Cedar</td>
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<td>Sweet Birch</td>
<td>Mountain Laurel</td>
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<td>Pignut Hickory</td>
<td>Phragmites</td>
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<tr>
<td>Oriental Bittersweet</td>
<td>American Pokeweed</td>
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<tr>
<td>Burning Bush</td>
<td>White Pine</td>
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<tr>
<td>Black Cherry</td>
<td>White Oak</td>
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<tr>
<td>Pin Oak</td>
<td>Northern Red Oak</td>
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<tr>
<td>Black Oak</td>
<td>Multiflora Rose</td>
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<td>Sassafras</td>
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<td>American Elm</td>
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At the end of the project, ELT received seven detailed management plans for all of the preserves along the Falls River corridor and an eighth for Johnson Farm. These along with two existing plans for Canfield/Meadow Woods and for Heron Pond bring the total to ten. A plan for The Preserve is anticipated in conjunction with Old Saybrook. Basic plans for other properties will be developed in the coming months.
Annual Meeting Report for 2015

The Essex Land Trust held its annual meeting on April 14 at Essex Meadows. 2015 was another successful year for the Essex Land Trust. Over 100 members, guests and Essex Meadows residents attended the reception and business meeting. Founded in 1968, the Land Trust continues to make steady progress in acquiring open space that helps to preserve the character of our community while offering natural areas for passive recreation.

A major development of 2015 was a significant bequest from the Elizabeth “Diz” Callender estate. As many of you know, Diz donated the Osage Trails property located on Foxboro Point a number of years ago. Not only does this bequest ensure funding for Osage Trails’ stewardship but it also provides additional resources for the Land Trust’s endowment.

Financial Report

Expenditures for 2015 amounted to $158,000. The main cost drivers included startup costs for The Preserve, Johnson Farm, Pond Meadow, specifically parking lots, fencing, kiosks, signage, and trail development. Additionally, there were ongoing costs such as mowing, tree removal, and treatment for invasives on several of our properties. Finally, recurring core expenses include Insurance, Accounting, Communications, Programs and Membership.

Funding of these expenses is derived from various sources: membership dues, donations, grants and income from our dedicated restricted Stewardship Accounts and investment portfolio. Special thanks go to the following organizations whose monetary and in-kind donations helped to fund our needs: Community Foundation of Middlesex County, Essex Printing, Bartlett Tree Experts, Landscape Specialties, Anne Penniman Associates, A.J. Shea Construction and Tree Tender.

The Land Trust’s Investment Portfolio generates income to help cover property maintenance and provides resources for acquiring land along with fundraising campaigns. At year-end 2015 the portfolio was valued at $1,790,000 of which nearly 50% was in restricted Stewardship Accounts and encumbered for pending property purchases.

Membership

Essex Land Trust membership continued strong with 380 household memberships in 2015. Notably, our Conservators for Life have reached an all time high of 141 or 37% of our membership. With 13% of Essex households being members of the Land Trust, we are very grateful for the support and commitment we receive from the community.

In addition to family memberships, the Land Trust benefits from the support of 21 local businesses. These Corporate members provide financial support but also in kind donations including services that help us in managing our operating expenses. These organizations demonstrate their commitment to our community by providing support in diverse ways.

Programs

The annual program of events included the usual mix of lectures, hikes and outdoor experiences. Our lectures featured talks about Black Bears, Butterflies and Osprey. Our hikes included properties such as Heron Pond, Viney Hill, Falls River, Osage Trails, The Preserve, our new Pond Meadow property and The Millrace. Other events included a Winter Raptors birding trip, the inauguration of Morgana’s Place pocket park, Arbor Day tree planting program at Essex Elementary School and a well-attended canoe/kayak paddle in North Cove.

Land Acquisitions

We added a number of new properties including the 70 acres of The Preserve situated in Essex, Johnson Farm, Pond Meadow adjacent to Comstock Park and, finally, we received Morgana’s Place a pocket park in Essex Village. Altogether, we increased our land holdings by 150 acres.

In May of last year, we closed on the 49-acre Johnson Farm property. We had originally the purchased development rights, which we did with the support of
our membership and the town. Now we have completed ownership with the purchase of the residual rights. This beautiful new property is now open to the public. There is a parking lot and a trailhead off Read Hill Road and a new pedestrian entrance off Walnut Street.

In June, we closed on a 6.6-acre segment on Great Meadow just south of the Essex Boat Club. This increases our total ownership on Great Meadow to about 100 acres. In July 1, we closed on the 5.68-acre Zito property. This property was donated to the Land Trust by Ted Zito. We have since reached agreement to purchase a 25-foot wide conservation easement across a neighboring property that will allow us to connect the Zito property on Windsor Lane to Windswept Ridge Preserve. This will create a new entrance to Windswept Ridge and open up this currently under-utilized Preserve to people in Centerbrook and Ivoryton.

There is an old saying, “Good things come to those who wait.” This saying applies to our next property. Five years ago, at the suggestion of the late David Hyde, the Land Trust reached out to Jane Anderson, a relative of David’s and a member of the Doane family, saying that the Land Trust would be interested in talking to her about her 17-acre property on Navy Lane. We have reached agreement to purchase this property, which will be called Doane’s Woods. This property is contiguous to James Glen Preserve off Hudson Lane and will make a great new addition to our Land Trust holdings.

**Stewardship**

The past year can be best described as “mind-boggling” in terms of stewardship accomplishments. Tom Rutherford and his team of twenty-eight stewards and their volunteer helpers continue to oversee our 24 properties checking on them regularly and making sure that trails remain in good condition. Some of the major projects completed this past year were:

- Establishing parking lots and installing information kiosks in The Preserve.
- Building a Bog Walk and Bridge in Pond Meadow; special thanks to Daniel Ryan for leading a scout team in building the bridge.
- The establishment of a butterfly landscape in Cross Lots, led by Bob Nussbaum and Barbara Burgess with the invaluable assistance of Anne Penniman of Anne Penniman Associates
- Building a parking lot for Johnson Farm, off of Read Hill Road along with creating trails to explore this new Land Trust property.
- Lastly, the annual Valley Regional High School Community Service day was once again a big help in working on various Land Trust properties.
Board Membership

We want to thank three departing Board members for their many hours of dedication and commitment to the Land Trust. Kathy Katz has been our membership Chair and made sure that our membership numbers have continued strong. Rob Hernandez, along with Judy Saunders, co-chaired our Programs & Events portfolio. Rob has been an inspired source of creativity in coming up with subjects for our lectures.

Bill Grover has been an Essex Land Trust member since at least 1998 and a Board member since 2004. His commitment to the Land Trust has been both long and significant. Among his many contributions, Bill has had the weighty responsibility of caring for Stanley Park (which happens to be next door to his home). He has been our link with the Corinthian Jazz Band, which has played at many Essex Land Trust picnic concerts and as a principal of Centerbrook Architects promoted a strong relationship with the Land Trust.

In addition to being President of the Land Trust for two years, Bill chaired the important Land Acquisition Committee where he played a critical role most notably in the transaction that led to acquiring the development rights to the Johnson Farm. The outright purchase of the farm in 2015 would not have been possible without the relationship developed by Bill with both Murwin and Polly Johnson.

Without a doubt, very few people are aware of a major fundraising success achieved, almost single-handedly, by Bill. I am referring to the complicated, convoluted and confusing program which resulted in the Essex Land Trust receiving over $300,000 from the federal government in conjunction with the preservation of Essex’ Great Meadow. These funds have helped the Land Trust acquire additional open space in the Great Meadow and elsewhere. Bill has been a great leader, an outstanding Board member, and an inspiration to many. We will miss his wise counsel.

Two familiar faces will be rejoining the Board. Goody Lelash will be returning to the Secretary position, replacing Nancy Rambeau while Chet Arnold will be taking on special projects in the area of property management. At the same time, two new faces will be joining the Board, Barbara Burgess and Geoff Furtney.

Barbara Burgess has an extensive background in education and community involvement. A master gardener, Barbara is the new President of the Essex Garden Club. Barbara will be working with the Programs Committee and will handle several other Board initiatives.

Geoff Furtney has been steward of The Millrace Preserve since 2014. An economist retired from the Hartford Financial, he brings many handy skills including carpentry and experience with bulldozers and backhoes. Geoff will be assuming the position of co-chief Steward along with Tom Rutherford.
Since July 31, 2015, there have been 5,235 Black Bear sightings in the State of Connecticut. Reports of bear sightings, even in heavily populated residential areas, have been on the rise. The Wildlife Division has also seen an increase in the number of reported problems with black bears. The primary contributing factor to bear nuisance problems is the presence of easily accessible food sources near homes and businesses. Fed bears can become habituated and lose their fear of humans. Bears should NEVER be fed, either intentionally or accidentally.

Black bears are impressive animals. Even a long-distance glimpse of one foraging in woodland is an unforgettable experience for most outdoor enthusiasts. However, glimpsing a bear in Connecticut was once unlikely because bears were extirpated from the state by the mid-1800s. Since then, bears have made a comeback. Their return is due, in part, to the regrowth of forestland throughout the region following the abandonment of farms during the late 1800s. Beginning in the 1980s, the DEP Wildlife Division had evidence of a resident black bear population. Since then, annual sighting reports have increased dramatically, indicating a rapid increase in the bear population. With the number of bears increasing in the state, it is important for residents to learn the facts about black bears and how to coexist with them.

The black bear is a stocky animal with short, thick legs. It is the smallest North American bear. In Connecticut, adult males, or boars, normally weigh from 150 to 450 pounds, while females, or sows, weigh from 110 to 250 pounds. Yearlings weigh 45 to 100 pounds. Adults are 5 to 6 feet long.

### Interesting Facts
- The black bear is an intelligent animal with keen senses of smell and hearing. It can detect the slightest aroma of food, which may lead the bear to campsites and near homes. Odor from carelessly stored food and garbage can lure bears long distances. Black bears travel and feed primarily at night, but can be active any time of the day.
- Females with cubs tend to have restricted home ranges which average 5 to 7 square miles in Connecticut, while males move about widely in home ranges of 12 to 60 square miles. The size of a home range varies geographically and often depends on the quality of habitat geographically and often depends on the quality of habitat.
- Black bears are not classified as true hibernators but their body temperature is lowered and heart rate slowed during winter denning. Denning enables bears to overcome unfavorable weather conditions and lack of food during winter.
- Black bear habitat is forestland, usually with deciduous and coniferous trees, as well as streams, swamps, and rock ledges. Bears prefer areas with thick understory vegetation and abundant food resources. Mature forests provide soft and hard mast (e.g., acorns) in late summer and fall. Wetlands are particularly important in spring when emerging plants are one of the few available foods. Bears are omnivorous.

### Black Bear Do’s & Don’ts
Black Bear attacks on humans are exceptionally rare. In residential areas, bird feeders, garbage, outdoor pet food, compost piles, fruit trees, and berry producing shrubs attract Black Bears. In most hiking areas, bears normally leave once they have sensed a human. However, at campsites and campgrounds bears can be attracted by poorly stored food and garbage.

**DO**
- remove birdfeeders and bird food from late March through November.
- eliminate food attractants by placing garbage cans inside a garage or shed. Add ammonia to trash to make it unpalatable.
- clean and store grills in a garage or shed after use.
- intentionally feed bears. Bears that become accustomed to finding food near your home may become “problem” bears.
- approach or try to get closer to a bear to get a photo or video.
- leave pet food outside overnight.
- add meat or sweets to a compost pile.

**DON’T**
- intentionally feed bears. Bears that become accustomed to finding food near your home may become “problem” bears.
- approach or try to get closer to a bear to get a photo or video.
- leave pet food outside overnight.
- add meat or sweets to a compost pile.
One of the Land Trust’s main objectives is to encourage the exploration and enjoyment of its properties. Three recent events highlight some of the opportunities available in our midst.

In April, naturalist and Ivoryton resident Bob Russo led a group of 15 to explore the vernal pools in The Preserve. Spotted Salamander (larvae and egg masses), Marbled salamander (larvae and newly metamorphosed juveniles), Wood frog tadpoles, Green frog, Red spotted newt and Spring peeper frogs were among the various critters found by the group.

In June, Pond Meadow steward John Cosenza led a group through its newly completed bog walk, which abuts Comstock field in Ivoryton. Over 30 tree species have been identified and labeled making this property a great learning opportunity to increase one’s knowledge about trees in our area.
Johnson Farm's official inaugural event took place in early July as steward Dana Hill gave over 40 participants a guided tour of the 49-acre property. Johnson Farm's large open fields, once home to Murwin Johnson's sheep herd, are now part of a trail system that includes a newly developed woodland trail through the deciduous forest located on the east side of the property.
Bears Seen When Hiking or Camping

Bears normally leave an area once they have sensed a human. If you see a bear, enjoy it from a distance. Aggression by bears towards humans is exceptionally rare.

DO make your presence known by making noise while hiking. Hike in groups. If you see a bear, make enough noise and wave your arms so the bear is aware of your presence.
DO keep dogs on a leash and under control. A roaming dog might be perceived as a threat to a bear or its cubs.
DO back away slowly if you surprise a bear nearby.
DON’T approach or try to get closer to a bear to get a photo or video.
DON’T run or climb a tree. If possible, wait in a vehicle or building until the bear leaves the area.
DO be offensive if the bear approaches you. Make more noise, wave your arms, and throw objects at the bear. Black bears rarely attack humans. If you are attacked, do not play dead. Fight back with anything available.
DON’T cook food near your tent or store food inside your tent. Instead, keep food in a secure vehicle or use rope to suspend it between two trees.

ELT Briefs
New Essex Land Trust Officers Elected

At its Annual Meeting the Essex Land Trust Board elected a new slate of officers. Pictures here are, from left to right, Treasurer Mike Carlucci, President Nancy Rambeau, Secretary Goody LeLash and Vice President Bob Nussbaum

Morgana’s Place Update

Work continues on the landscaping of Morgana’s Place, the small pocket park donated to the Land Trust by Ina Bomze last year. Trees and native perennials have been planted and a new lawn seeded with the help of Giroux Landscaping, which is donating its services to mow the lawn. Neighbors from the area and others have made donations to help fund the costs involved, which included the installation of an irrigation system.

Membership Renewal Reminder

Membership renewal reminders were sent out at the end of April. Results to date are very encouraging. This note is a gentle reminder to those who have not renewed yet that we count on everyone’s continuing support for the Land Trust. Membership dues and individual donations are important components of our annual operational budget. We’d also be very grateful if you could keep your eyes and ears open for other potential Land Trust members. Whenever you find a candidate, just send us an email (info@essexlandtrust.org). Your support really does make a difference!
Coming Events – Mark Your Calendar!

Every year the Essex Land Trust organizes a calendar of diverse events including hikes, lectures, nature talks, canoeing and kayaking trips, all featuring expert guest speakers and knowledgeable naturalists. All of these events are free and open to the general public.

Explore Essex’s Best Kept Secret
Saturday, September 24, 9 am
Bushy Hill Nature Center at 253 Bushy Hill Road, Ivoryton
Become acquainted with the 700-acre Incarnation Camp and Bushy Hill Nature Center, Essex’s largest privately owned property. We will be guided by the Nature Center’s staff and visit this remarkable assemblage of woods, fields, lakes, and wetlands, seeking out the rich range of plants and animals that call it home. Suitable for all ages. Moderate walking of up to 1 1/2 hours. Rain/thunderstorms cancel. Alternate rain date: Saturday, October 1.

Can You Name That Tree?
Saturday, October 8, 9 am
The Preserve parking lot off of Ingham Hill Road in Essex
A walking tour of the Preserve by tree expert Robert Kuchta who will teach you how to identify the trees that are common in Essex and describe their natural history and human uses. Fun for all ages. Easy to moderate walking. 1 1/2 hours duration. Meet at first Preserve access parking lot. Rain cancels.

7th Annual Ivoryton Library 5K Run
Saturday, October 22
Registration begins at 7:30 am Ivoryton Village Green
Co-sponsored in part by the Essex Land Trust, the Ivoryton Library’s 7th Annual Run Local, Read Local 5K Run/Walk, will benefit the Library and its programs. The race meanders through Ivoryton Village and the Essex Land Trust’s Falls River Preserve. 5K prizes awarded in 7 age groups. Runners 8 and under running in the Pumpkin Run will be given medals, and pumpkins to paint. Registration begins at the Ivoryton Village Green at 7:30 am. Race starts at 8:45 am for children and at 9:15 am for adults. Parking is available in designated lots. Rain or shine.